Manitoba Monthly Surveillance Unit Report
Reported up to October 31, 2010

Highlights:

1. **Antimicrobial Resistant Organisms**
   Together Methicillin-resistant *Staphylococcus aureus* (MRSA) and *Clostridium difficile* (*C. difficile*) accounted for 66% of all non-STBBI related communicable diseases reported to Manitoba Health during October 2010.

   The data reveal that there are increased numbers of MRSA and Vancomycin-resistant *Enterococcus* (VRE) in 2010 compared to 2009. Since becoming a reportable disease in Manitoba in 1999, the number of MRSA cases has been increasing every year, especially in northern regions. The increased number of VRE cases in 2010 is attributable to hospital-related VRE outbreaks reported this year.

2. **Sexually Transmitted & Blood-Borne Infections (STBBI)**
   There were 569 reported cases of sexually transmitted infections (chlamydia, gonorrhoea, and syphilis) in October 2010:
   - 474 reported cases of chlamydia (CT) only
   - 52 reported cases of gonorrhoea (GC) only
   - 37 reported co-infections of CT and GC and
   - 6 reported cases of syphilis

   Chlamydia has the highest incidence of reported STBBI. Females between the ages of 15 and 24 years comprised 41% of all reported chlamydia cases in the province.

   The 6 syphilis cases in October 2010 include both infectious and non-infectious cases, as well as those requiring further follow-up to determine their status.

   In October 2010, there were no cases of Hepatitis B virus (HBV), 23 cases of Hepatitis C virus (HCV) and 11 cases of HIV newly reported in Manitoba.

3. **Other Communicable Diseases**
   The number of reported cases in October 2010 was within or below the statistically expected range for these reported communicable diseases with the exception of the following diseases:

   - Meningococcemia (blood): 2 positive lab-confirmed cases reported; less than 1 expected in an average month.
   - Pertussis: 4 positive lab-confirmed cases reported; less than 4 expected in an average month.
   - Shigellosis: 9 positive lab-confirmed cases reported; less than 7 expected in an average month.

- Toxoplasmosis: 2 positive lab-confirmed cases reported; less than 2 expected in an average month.

The expected number of cases and range is statistically based on the number of reported cases during September, October, and November, 2005-2009.

The data reveal that there are increased numbers of verotoxigenic E. coli, Shigella, and Pertussis in 2010 compared to 2009. These increases are attributable to the occurrence of isolated outbreaks reported to Manitoba Health.

Explanatory Notes:

General:

Each monthly communicable disease report includes the number of cases of notifiable communicable diseases reported by lab or health provider during each individual month. Data for the monthly summary are aggregated based on the earliest of: symptom onset date, specimen collection date, or report date. For the majority of cases, the date used will be the specimen collection date as symptom onset date is frequently not recorded. Some discrepancy of numbers may be based on reporting delays.

The observed numbers of cases are compared to the statistically expected range for each reportable communicable disease. This involves comparing the current month's case counts to the average case counts for the same month, one month subsequent and one month prior for the previous five years. These same months over the five years are used to determine the expected range of cases using the statistical calculation of standard deviation. Using this specific monthly pattern allows for adjustment within the statistics for both seasonality and cyclical disease patterns.

The year-to-date case counts are based on the calendar year.

The disease data reported in the monthly report has not been analyzed for severity or associated deaths at this time.

Disease specific information:

Methicillin-resistant *Staphylococcus aureus* (MRSA) positive results within Manitoba include both individuals who are symptomatic of infection and colonized individuals who have no symptoms and are mostly diagnosed during admission screening activities at facilities. If facilities increase their screening activities, it would usually result in a rise in colonized MRSA cases.

A new case of Hepatitis C Virus (HCV) infection is defined as a first positive test for an identifiable individual.

A new case of Human Immunodeficiency Virus (HIV) infection is defined as a positive test with a unique code that has not been previously linked to a positive test result in Manitoba. Positive HIV tests included in this month's statistics include both nominal and non-nominal testing results.

The number of Tuberculosis cases year-to-date may not equal the sum of cases reported for each month of this year. As new test results are received, there may be a change in diagnosis. Occasionally, diagnosis dates are updated, which also contributes to total numbers varying from month to month.

SUMMARY OF COMMUNICABLE DISEASE FOR October 2010

		MONTHLY TOTAL				YEAR-TO-DATE	
ICD9	DISEASE/INFECTION	2009	2010	Expected*	Ex. Range**	2009	2010
006.9	AMEBIASIS	2	2	3	0-6	37	29
022	ANTHRAX				***		
127.0	ASCARIASIS			0	0-1		1
005.8	B. CEREUS			0	0-1	5	
320.1	BAC. MENINGITIS - PNEUM	1		0	0-1	4	
320.7	BAC.MENINGITIS-LISTERIA				***		
038.0	BETA STREP SEPTICEMIA	13	13		***	132	125
116.0	BLASTOMYCOSIS	2	1		***	7	6
005.1	BOTULISM				***		
023	BRUCELLOSIS			0	0-0	1	
005.2	C. PERFRINGENS	1		1	0-2	3	1
008.43	CAMPYLOBACTER	30	23	22	6-38	214	210
558.2	CLOSTRIDIUM DIFFICILE	78	51		***	701	686
046.1	CREUTZFELD-JACOB DISEASE	1			***	3	
007.8	CRYPTOSPORIDIOSIS	5	2	6	0-18	35	19
061.0	DENGUE FEVER			0	0-0		
065.4	DENGUE HEMORRHAGIC FEVER			0	0-0		
V02.4	DIPH.CARRIERS		1	0	0-1	1	8
032	DIPHTHERIA CASES			0	0-1		4
123.4	DIPHYLLOBOTHRIUM SPP	3		1	0-3	4	7
008.0	E. COLI-VEROTOXIGENIC	3	2	6	0-20	38	79
054.3	ENCEPHALITIS			0	0-0		
005.9	FOOD POISONING OTHER			0	0-0		
007.1	GIARDIA LAMBLIA	14	8	10	4-16	112	97
320.0	H.INFLUENZAE (CSF)			0	0-0		1
041.5	H.INFLUENZAE (OTHER STERILE)			0	0-1	3	
041.59	HAEM. INFLUENZAE (non-B)				***	1	1
480.8	HANTA VIRUS			0	0-0		
283.11	HEMOLYTIC UREMIC SYNDROME			0	0-1		1
070.1	HEPATITIS A		1	0	0-1	12	7
070.3	HEPATITIS B			0	0-1	5	1
070.51	HEPATITIS C	28	23	30	16-44	293	268
487.1A	INFLUENZA A****	5	1		***	92	1
487.1B	INFLUENZA B				***	38	
482.83	LEGIONELLA			0	0-1		5
085.9	LEISHMANIASIS			0	0-0		
030.9	LEPROSY			0	0-0		
027.0	LISTERIA MONOCYTOGENES		1	0	0-1	2	4
088.81	LYME DISEASE	1		0	0-1	1	
084	MALARIA	1	1	2	0-4	8	11
055.9	MEASLES			0	0-0		1
036.0	MENINGOCOCCAL CSF			0	0-0		
036.82	MENINGOCOCCAL ARTHROPATHY				***		2
036.2	MENINGOCOCCEMIA BLOOD		2	0	0-0		6
B95.6	MRSA	299	308	215	88-342	2273	2816
072.9	MUMPS			0	0-1	5	2
036.89	N.MENINGITIDIS OTHER	1		0	0-1	7	
728.86	NECROTIZING FASCIITIS		1	1	0-3	3	11
729.1	NECROTIZING MYOSITIS				***		
323.9	OTHER ENCEPHALITIS			0	0-1		
033.1	PARAPERTUSSIS	2			***	2	
033.0	PERTUSSIS	1	4	1	0-3	25	51
038.2	PNEUM. SEPTICEMIA	13	18	9	0-19	99	123
073.9	PSITTACOSIS			0	0-0		

* Mean of 15 month totals, from previous, comparable and subsequent months for the past 5 years.
** Mean +/- 2 standard deviations of the mean.
*** Data collected for less than 5 years.
**** Excludes Influenza A Pandemic H1N1 (pH1N1). There were no cases of pH1N1 in October 2010.

SUMMARY OF COMMUNICABLE DISEASE FOR October 2010

		MONTHLY TOTAL				YEAR-TO-DATE	
ICD9	DISEASE/INFECTION	2009	2010	Expected*	Ex. Range**	2009	2010
083.0	Q FEVER			0	0-0	2	3
082.0	RICKETTSIA RICKETTSII				***		1
056.9	RUBELLA			0	0-0	2	2
771.0	RUBELLA CONGENTIAL			0	0-0		
041.2	S.PNEUM.OTHER	1		0	0-1	8	11
003.0	SALMONELLA	27	18	15	1-29	230	198
079.82	SARS (CORONAVIRUS)				***		
120	SCHISTOSOMIASIS			0	0-1	1	
079.99	SEVERE RESPIRATORY ILLNESS				***		
004	SHIGELLOSIS	1	9	2	0-6	20	42
050.9	SMALLPOX				***		
005.0	STAPH FOOD POISON			0	0-0		
785.5	STAPH TOXIC SHOCK				***		
481.9	STREP PNEUMONIA - PR			0	0-1		
041.1	STREP PYOGENES - OTHER	12	8		***	91	76
711.0	STREP.PNEUM.ARTHRITIS			0	0-0		
580.0	STREPT GLOMERULONEPHRITIS			0	0-0		
040.89	STREPT TOXIC SHOCK			0	0-0		
481	STREPTOCOCCUS PNEUMONIAE			0	0-0		
127.2	STRONGYLOIDES	2	2	1	0-3	10	15
037	TETANUS			0	0-0		1
130.9	TOXOPLASMOSIS		2	0	0-1	1	4
124	TRICHINOSIS			0	0-0		2
086	TRYPANOSOMA CRUZI			0	0-1		3
013	TUBERCULOSIS - NON-RESP.	2		2	0-4	25	26
010	TUBERCULOSIS - PRIM.			0	0-2	9	7
011	TUBERCULOSIS - RESP	6	6	7	0-15	102	81
021.9	TULAREMIA			0	0-1	1	1
002.0	TYPHOID	1	1	0	0-1	3	5
081.9	TYPHUS			0	0-0		
B96.8	VANCOMYCIN R. ENTEROCOCCI	17	36		***	77	263
005.4	VIBRIO PARAHAEMOLYTICUS				***		2
070.59	VIRAL HEP. OTHER		2		***		4
B95.7	VRSA			0	0-0		
062.1	W. EQUINE ENCEPHALITIS			0	0-0		
066.41	WNV NEUROLOGICAL				***		
008.44	YERSINIA ENTEROCOLITICA	1	1	2	0-5	7	6
		574	**548**			**4755**	**5337**

* Mean of 15 month totals, from previous, comparable and subsequent months for the past 5 years.
** Mean +/- 2 standard deviations of the mean.
*** Data collected for less than 5 years.

SUMMARY OF COMMUNICABLE DISEASE BY AGE AND GENDER FOR OCTOBER 2010

		<1		1-4		5-9		10-14		15-19		20-24		25-29		30-39		40-49		50-59		60-69		70-79		80+		Missing Age/Gender	Total
ICD9	Disease Name	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M		
006.9	AMEBIASIS																1		1										2
038.0	BETA STREP SEPTICEMIA				1	1											1		4	1		2	2			1			13
116.0	BLASTOMYCOSIS								1																				1
008.43	CAMPYLOBACTER				1		2				1	1	1		3	2	1	2		4	2	1		1	1				23
558.2	CLOSTRIDIUM DIFFICILE			1							1		1			1			2	3	1	8	6	7	4	10	6		51
007.8	CRYPTOSPORIDIOSIS											1		1															2
V02.4	DIPH. CARRIERS																		1										1
008.0	E. COLI 0157								2																				2
007.1	GIARDIA LAMBLIA			1	1	1													2	2			1						8
070.1	HEPATITIS A								1																				1
070.51	HEPATITIS C					1				1		2		1	1		6	2	5	2		1						1	23
070.59	HEPATITIS OTHER (VIRAL)	1						1																					2
487.1A	INFLUENZA A		1																										1
027.0	LISTERIA MONOCYTOGENES																								1				1
084	MALARIA															1													1
036.2	MENINGOCOCCEMIA(MGCCEMIA						1												1										2
B95.6	MRSA	6	6	27	13	10	6	13	8	9	9	11	13	7	8	17	13	19	16	9	16	11	9	7	8	16	21		308
728.86	NECROTIZING FASCIITIS																			1									1
033.0	PERTUSSIS		2			1			1																				4
038.2	PNEUM. SEPTICEMIA				3	1										1				2	2	2	1	1	4	1			18
003.0	SALMONELLA	1		1			1		2	1		2			1	1	3	1	3		1								18
004	SHIGELLOSIS			3	2			1					1					1			1								9
041.1	STREP PYOGENES - OTHER ST		1							1								2	1	1	1				1				8
127.2	STRONGYLOIDIASIS										2																		2
130.9	TOXOPLASMOSIS							1							1														2
013	TUBERCULOSIS - NON-RESP.																												
010	TUBERCULOSIS - PRIM.																												
011	TUBERCULOSIS - RESP															1	1		1	1				1	1				6
002.0	TYPHOID					1																							1
B96.8	VANCOMYCIN RES. ENTER.															1			4	4	5	3	3	4	1	9	2		36
008.44	YERSINIA ENTEROCOLITICA																			1									1
		8	10	33	21	16	10	16	15	12	13	17	16	9	14	25	26	27	41	31	29	28	22	21	21	37	29		**548**

SUMMARY OF COMMUNICABLE DISEASE BY REGION (RHA) FOR OCTOBER 2010

ICD9	Disease/Infection	Winnipeg	Brandon	N. Eastman		S. Eastman		Interlake		Central		Assiniboine		Parkland		Norman		Burntwood		Churchill	OOP**	Missing	TOTAL
*Case Referred to:**				*F*	*P*	*F*	*P*	*F*	*P*	*F*	*P*	*F*	*P*	*F*	*P*	*F*	*P*	*F*	*P*				
006.9	AMEBIASIS	1	1																				2
038.0	BETA STREP SEPTICEMIA	9	2	1														1					13
116.0	BLASTOMYCOSIS	1																					1
008.43	CAMPYLOBACTER	7	1		2		1		5		2		2				1	2					23
558.2	CLOSTRIDIUM DIFFICILE	27	2		1		1		3		7		4		2			3	1				51
007.8	CRYPTOSPORIDIOSIS	1			1																		2
V02.4	DIPH. CARRIERS																		1				1
008.0	E. COLI 0157								1								1						2
007.1	GIARDIA LAMBLIA	4	2				1								1								8
070.1	HEPATITIS A		1																				1
070.51	HEPATITIS C	13	1		1			3	1		1				1		1				1		23
070.59	HEPATITIS OTHER (VIRAL)	2																					2
487.1A	INFLUENZA A																1						1
027.0	LISTERIA MONOCYTOGENES	1																					1
084	MALARIA	1																					1
036.2	MENINGOCOCCEMIA(MGCCEMIA	2																					2
B95.6	MRSA	107		5	4		10	4	6	1	2	1	1		4	2	10	138	12	1			308
728.86	NECROTIZING FASCIITIS											1											1
033.0	PERTUSSIS	2	1															1					4
038.2	PNEUM. SEPTICEMIA	11			1						1			1	1			3					18
003.0	SALMONELLA	6	2		1		1		2		3			1	1			1					18
004	SHIGELLOSIS		1														1	7					9
041.1	STREP PYOGENES - OTHER ST	3									1				1	1		1	1				8
127.2	STRONGYLOIDIASIS	2																					2
130.9	TOXOPLASMOSIS						1				1												2
013	TUBERCULOSIS - NON-RESP.																						
010	TUBERCULOSIS - PRIM.																						
011	TUBERCULOSIS - RESP	3	1															1	1				6
002.0	TYPHOID	1																					1
B96.8	VANCOMYCIN RES. ENTER.	21	1				4		6		2							2					36
008.44	YERSINIA ENTEROCOLITICA		1																				1
		225	17	6	11		19	7	24	1	20	2	7	2	11	3	15	160	16	1	1		548

* F=Federal Jurisdiction (First Nations and Inuit Health); P=Provincial Jurisdiction

** OOP=Out of Province

STBBI Infection Summary Report - October 2010

	MONTHLY TOTAL		YEAR-TO-DATE	
DISEASE/INFECTION	**2009**	**2010**	**2009**	**2010**
All Chlamydia Infections	550	511	5435	5415
All Gonorrhea Infections (including PRNG)	82	89	924	826
All Syphilis Infections*	3	6	40	59
Gonorrhea & Chlamydia Co-infections	28	37	380	370
HIV	10	11	92	107

Total Number of STBBI Cases by Age and Gender - October 2010

	<1		1-4		5-9		10-14		15-19		20-24		25-29		30-39		40-49		50-59		60-69		70-79		80+		Missing	
Disease Name	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**age/gender**	**TOTAL**
Chlamydia Only Cases							7	1	102	42	92	65	54	47	20	27	5	5	1	3	1	1	1					474
Gonorrhea Only Cases									7	2	7	9	4	1	6	7	2	3		1	1	1	1					52
Syphilis Only Cases														3		1		1								1		6
GC and CT Cases							1		8	2	7	4	3	3	3	4		1		1								37
TOTAL							8	1	117	46	106	78	61	54	29	39	7	10	1	5	2	2	2			1		569
HIV												1		3	1	1	1	2	1	1								11

Regional STBBI Distribution - October 2010

Disease/Infection	**Winnipeg**	**Brandon**	**N. Eastman**		**S. Eastman**		**Interlake**		**Central**		**Assiniboine**		**Parkland**		**Norman**		**Burntwood**		**Churchill**	**OOP*** **	**Missing**	**TOTAL**
Case Referred to: **			***F***	***P***	***F***	***P***	***F***	***P***	***F***	***P***	***F***	***P***	***F***	***P***	***F***	***P***	***F***	***P***				
All Chlamydia Infections	260	22	15	13	1	8	9	10	3	11		15	5	13	4	26	61	29		5	1	511
All Gonorrhea Infections	48	1	2	5			2	1				1		1		5	16	7				89
All Syphilis Infections	4	1						1														6
GC and CT Infections	19		1	2			1									3	8	3				37

* The 6 cases in October 2010 include both infectious and non-infectious cases, as well as those requiring further follow-up to determine their status.
** F=Federal Jurisdiction (First Nations and Inuit Health); P=Provincial Jurisdiction
*** OOP=Out of Province